

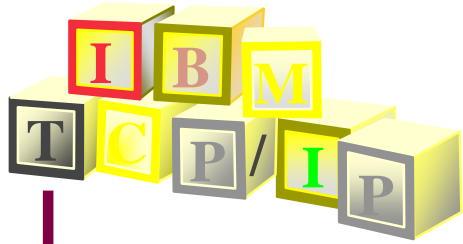
TCP/IP V3.5 For WS 4.0 SMP Feature

9/9/96

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Overview TCP/IP V3.5

- Description

- f* Supports WS 4.0 SMP Feature
- f* This means it's SMP Safe
- f* And it keeps WS4 Look & Feel

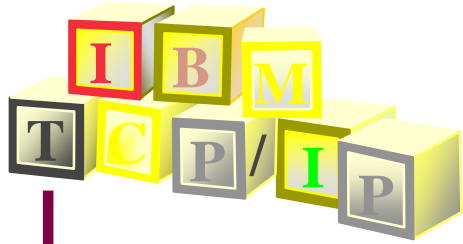
- How is TCP/IP V3.5 built?

- f* TCP/IP Apps- Most are same as Merlin, some same as WS 4.0
- f* Stack- Updated from Merlin to be SMP safe, doesn't support uniP
- f* Help & Online Doc's - Same as WS 4.0
- f* Rationale- SMP is a feature

- RFCs same as WS 4.0, nothing new

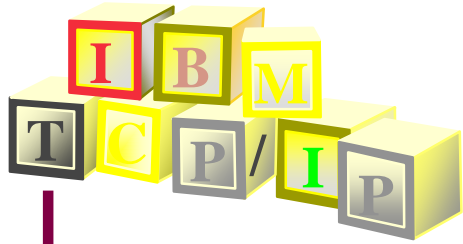
- Version history

- f* TCP/IP V4.0 (Merlin)
- f* TCP/IP V3.5 (WS 4.0 SMP Feature)
- f* TCP/IP V3.1 (Warp Server 4.0)
- f* TCP/IP V2.0 (Warp Connect 2.0)



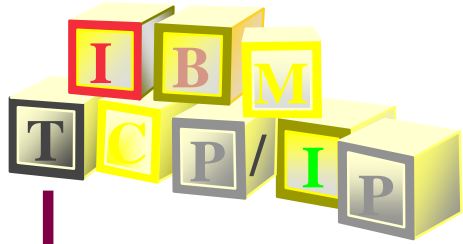
Terminology

- Warp Server 4.0 or WS 4.0
- OS/2 Warp 4 (Merlin)
- SMP - Symmetrical Multiprocessing
- uniP - uni-processor, uni-processing
- TCP/IP Stack or "the stack"
- SNMP -
Simple Network Mgmt Protocol
- PComm 3270/5250 Emulation-
Personal Communications Emulator
- Communications Server for OS/2
Warp, V4.1
- Remote Client Download -
Download TCP/IP V3.5 Apps and
V4.0 Stack from server to client



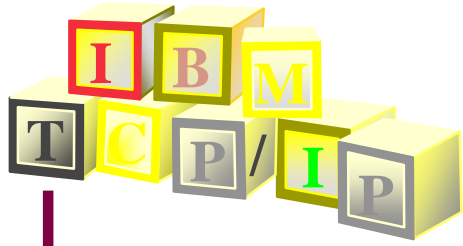
Overview - Features

- TCP/IP Apps & Stack execute in the WS 4.0 SMP Feature environment
- What's the Same as WS 4.0?
 - SNMP Configuration, Installation
 - DHCP & DDNS Servers
 - Terminal Emulators:
PMANT, 3270TN, 5250TN
 - Web Explorer V1.02
 - Help, Command Ref, Online Doc'
 - National Language Versions
- What's the same as Merlin?
 - All other TCP/IP Apps come from Merlin TCP/IP support
 - Also, DHCP & DDNS Clients
 - PComm is not shipped with SMP but can be downloaded to replace PMANT, 3270TN, 5250TN
 - Bug fixes



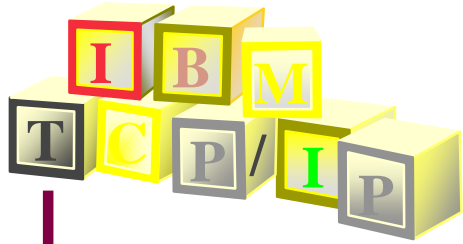
Overview - Features (continued)

- Netscape 3.0 by downloading
- Unsupported by TCP/IP
 - f* Multicast
 - f* Socks
 - f* Variable Subnet Routing (VSR)
- No SMP exploitation



Limitations & Dependencies

- TCP/IP V3.5 stack is supported on SMP only and not on a uniP system
- Multicast is not supported on SMP although it is on Merlin
- Tested scenarios:
 - f* WS 4.0 SMP - TCP/IP 3.5 Apps on 3.5 Stack
 - f* Remote Client Download - TCP/IP 3.5 Apps on 4.0 (Merlin) Stack on a Warp Connect uniP system
 - f* SNMP - Configuration (from TCP/IP Config. notebook) & install
 - f* PComm3270/5250 Emulation - User downloads to run on SMP



Installation

- Directories of installable files on the CD that make up TCP/IP support

f \CID\CLIENT\TCPAPPS

f \CID\SERVER\TCPAPPS

- TCP/IP Application files installed on (default) C:\TCPIP*.*

- TCP/IP Stack and stack utilities installed on C:\MPTN\BIN*.*

- Migration/Compatibility

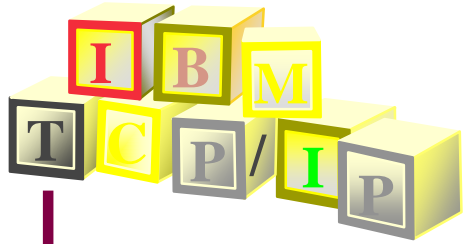
f TCP/IP Apps: The user may see some differences between the SMP Feature and original WS 4.0

–SYSLEVEL.DDN = 3.50

–SYSLEVEL.DHS = 3.50

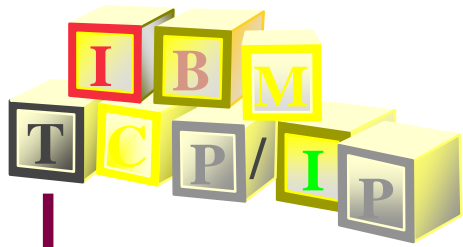
–SYSLEVEL.TCP = 3.50

–SYSLEVEL.DHC = 4.00



Installation (continued)

- f* TCP/IP Stack: The user may see some Command Line Interface differences in stack utilities between SMP and original WS 4.0
- f* SYSLEVEL.MPT and .TRP
 - Merlin = 5.10
 - Comm Server = 5.11
 - SMP = 5.20
- f* Execute "inetver" stack utility to show: "Inet Version: 3.50smp"
- f* SMP version of "iptrace" utility is different than version for uniP (Merlin version will trap on SMP)



Configuration & Setup

- TCP/IP Configuration

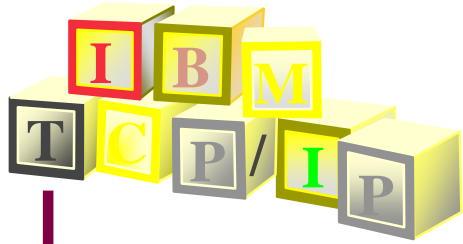
- f* Configuration notebook pages are same as WS 4.0

- f* Merlin source code was used and modified as follows to achieve the same WS 4.0 Look & Feel

- Removed VSR
 - Removed Socks
 - Added SNMP

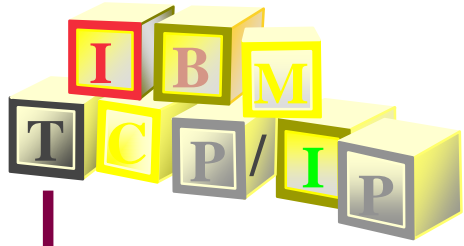
- f* Note: SNMP is shipped in System View Agent with Merlin but SVA does not ship with SMP

- f* SNMP supported by System View Agent team in Tivoli at Raleigh.



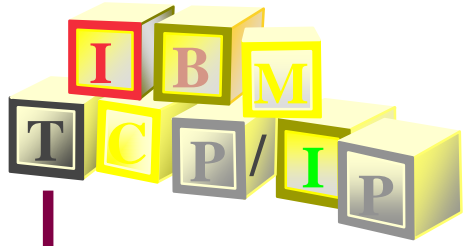
Invocation & Startup

- How this function is started
 - f* Same as WS 4.0
- What happens during initialization
 - f* User sees the TCP/IP folder appear and populated
 - f* TCP/IP Stack is started



Error Messages, Codes & Logs

- Same service advice as with Warp Server 4.0
- No new significant messages, codes
- Same logs



Common User Problems

- Not necessarily common problems but may be points worth knowing

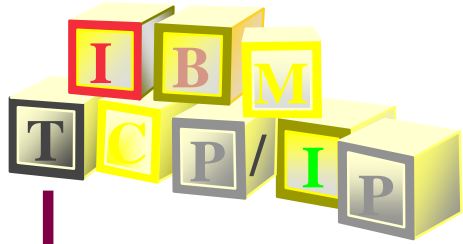
f Understanding version numbers

- TCP/IP V3.5 is for SMP
- TCP/IP V3.5 Apps are from Merlin & WS 4.0 and retain their original version numbers

f If a user installs the TCP/IP Stack (SYSLEVEL.MPT= 5.20) from SMP on a uniP (not supported)

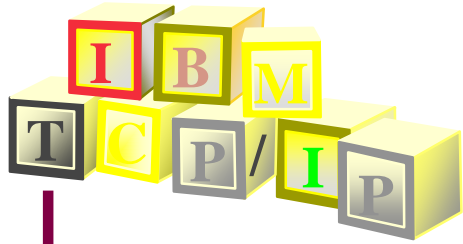
- To recover: Delete it and install the supported stack such as Merlin's (SYSLEVEL.MPT= 5.10)

f All online Help & Documentation is original WS 4.0 while most Apps are from Merlin - this could result in some anomalies between them (information vs actual function)



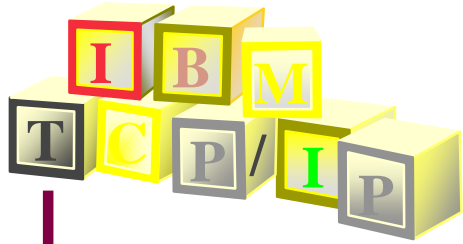
Common User Problems (cont.)

- SMP System Readme says
 - f* SMP Stack not supported on uni-Processor (MPTS)
 - f* WebExplorer Backward/forward arrows don't work - workaround is to use web map
- TCP/IP folder's Readme is WS4.0 level (TCP/IP v3.1) and not SMP level (TCP/IP v3.5)
- UltiMail
 - f* Log file may become corrupted after multiple installs
 - f* Mail Cabinet shouldn't be empty but have at least "Sent Mail" folder
 - f* A possible workaround is to save the current umailsrv.pro file as umailsrv.old and rename the previous backed up umailsrv.* file to umailsrv.pro
 - f* UltiMail not IBM strategic and not likely to be used much on SMP
 - f* For support: Jason Blakely, RTP



Debugging & Troubleshooting

- Support user questions in the same manner as with Warp Server 4.0
- Hint: Determine if a user problem is new/unique to SMP or also occurred on Warp Server 4.0 uniP. Take advantage where possible of the WS 4.0 service experience.
- Same TCP/IP APIs as Warp Server 4.0, no new APIs
- The underlying WS 4.0 TCP/IP v3.1 stack has evolved to v3.5 for SMP
- Try to determine if a reported trap or hang is caused by the SMP kernel OS rather than TCP/IP, direct kernel problems to PSP, Austin (Ayo Anise)
- Netscape support owned by Austin



Source Overview

- TCP/IP V3.5 on CMVC
- CMVC Family= wstcp
- CMVC Releases of source code for building TCP/IP V3.5

*f*os2apps32_smp

- Links to Merlin's os2apps32
- Links to WS4's os2appsnl

*f*os2stack40smp

- Links to Comm Server's Lynx

*f*IPP_BASE_SMP

- DDNS/DHCP Servers (WS 4.0)